

**Board of Forestry and Fire Protection
Title 14 of the California Code of Regulations**

[Notice published January 28, 2000]

NOTICE OF PROPOSED RULEMAKING

Protection for Threatened and Impaired Watersheds, 2000

The Board of Forestry and Fire Protection (Board) proposes to adopt the regulations described below after considering all comments, objections, and recommendations regarding the proposed action.

PROPOSED REGULATORY ACTION

The Board proposes to amend the following existing sections of Title 14 of the California Code of Regulations (14 CCR):

§ 895	Abbreviations Applicable Throughout Chapter
§ 895.1	Definitions
§ 898	Feasibility Alternatives
§ 898.2	Special Conditions Requiring Disapproval of Plans
§§ 914.8 [934.8, 954.8]	Tractor Road Watercourse Crossing
§§ 916 [936, 956]	Intent of Watercourse and Lake Protection
§§ 916.2 [936.2, 956.2]	Protection of the beneficial Uses of Water <u>and</u> <u>Riparian Functions</u>
§§ 916.6 [936.6, 956.6]	Alternative Watercourse and Lake Protection
§§ 923.3 [943.3, 963.3]	Watercourse Crossings

The Board proposes to adopt the following new sections of Title 14 of the California Code of Regulations (14 CCR):

§§ 916.9 [936.9, 956.9]	<u>Protection and Restoration in Watersheds with Threatened or Impaired Values</u>
§§ 916.11 [936.11, 956.11]	<u>Effectiveness and Implementation Monitoring</u>
§§ 916.12 [936.12, 956.12]	<u>Section 303(d) Listed Watersheds</u>
§§ 923.9 [943.9, 963.9]	<u>Roads and Landings in Watersheds with Threatened or Impaired Values</u>

PUBLIC HEARING

The Board will hold a public hearing starting at 1:00 p.m. on Tuesday, March 14, 2000. The hearing will be held in the Auditorium (Room 102) of Office Building 8, at 714 P Street, Sacramento, California. At the hearing, any person may present statements or arguments, orally or in writing, relevant to the proposed action described in the

Informative Digest. The Board requests, but does not require, that persons who make oral comments at the hearing also submit a summary of their statements. Additionally, pursuant to Government Code § 11125.1, any information presented to the Board during the open hearing in connection with a matter subject to discussion or consideration becomes part of the public record. Such information shall be retained by the Board and shall be made available upon request.

WRITTEN COMMENT PERIOD

Any person, or authorized representative, may submit written comments relevant to the proposed regulatory action to the Board. The written comment period ends at 5:00 p.m. on Tuesday, March 13, 2000. The Board will consider only written comments received at the Board office by that time (in addition to those comments received at the public hearing). The Board requests, but does not require, that persons who submit written comments to the Board reference the title of the rulemaking proposal in their comments to facilitate review. All written comments shall be submitted to the following address:

Board of Forestry and Fire Protection
Attn: Dennis O. Hall
Regulations Coordinator
P.O. Box 944246
Sacramento, CA 94244-2460

AUTHORITY AND REFERENCE

Public Resources Code (PRC) § 4551 authorizes the Board to adopt such Rules and regulations as it determines are reasonably necessary to enable it to implement, interpret, or make specific sections 4513, 4514.3, 4551.5, 4551.7, 4552, 4553, 4562.5, 4562.7, 4562.9, 4582, and 4584 of the Public Resources Code.

INFORMATIVE DIGEST/PLAIN ENGLISH OVERVIEW

The Z'berg-Nejedly Forest Practice Act of 1973 (ref. Division 4, Chapter 8 of the Public Resources Code) establishes the Legislature's concern throughout the state relating to the use, restoration, and protection of the forest resources. The Legislature further recognized that these forest resources provide watershed protection and fisheries maintenance. The Legislature declared that it is the policy of the state to encourage responsible forest management that considers the public's need for watershed protection and fisheries (ref. PRC § 4512). Furthermore, the Legislature stated its intent to create and maintain an effective and complete system of regulation for all timberlands. This system is to assure the productivity of timberlands and the goal of maximum sustained production of high quality timber products. It is also intended to give consideration to values related to watershed, wildlife, and fisheries (ref. PRC § 4513). Public Resources Code § 4551 gives the Board the authority to adopt such Rules and regulations which will enable it to carry out its responsibilities to protect fish and water resources, including but not limited to streams, lakes, and estuaries.

In 1996, the State Fish and Game Commission listed Coho salmon south of San Francisco Bay as threatened under the State Endangered Species Act (ESA). Then in 1997, the National Marine Fisheries Service (NMFS) listed Coho salmon as threatened throughout its range in California under the Federal ESA, and Steelhead trout have been designated as candidate species. Additionally, the U.S. Environmental Protection Agency (USEPA) has listed several North Coast streams as water quality limited under Section 303(d) of the Federal Clean Water Act (CWA); many of the listings are for factors that can be affected by timber operations.

In March of 1998, the Resources Agency of California and the National Marine fisheries Service (NMFS) entered into a Memorandum of Agreement (MOA). As a critical component of this MOA, the state agreed to ". . . organize an independent panel of scientists [the Scientific Review Panel or SRP] to undertake a comprehensive review of the California Forest Practice Rules (FPRs), with regard to their adequacy for the protection of salmonid species" (*Report of the Scientific Review Panel* [SRP report], 1999). Following an extensive review of the Rules, "The SRP concluded the FPRs, including their implementation (the 'THP process') do not ensure protection of anadromous salmonid populations" (*Report of the Scientific Review Panel*, 1999).

The Board of Forestry and Fire Protection recognizes the substantial concerns raised by those other agencies additionally charged with the protection of the state's valuable watershed resources. The Board is also extremely aware of the need to protect listed species that may be impacted by practices that are regulated under the Board's purview. However, the Board also realizes the time constraints that are involved in its ability to promulgate Rules under the Administrative Procedures Act in order for changes to be implemented with full and meaningful participation by the public and other agencies in the rulemaking process. Considering these factors, the Board has proposed the following amendments to the Forest Practice Rules under this rulemaking package. The Board believes that these changes are necessary to address the most immediately pressing issues regarding the listing of salmonids and the various North Coast streams. These issues center on the need to address timber operations in a watershed where: (1) water bodies are listed pursuant to CWA Section 303(d) as water quality limited due to factors (e.g., sediment, temperature, or large woody debris (LWD)) that may be affected by timber operations, or (2) populations of anadromous salmonids, other aquatic species, or riparian-dependent species that are listed as threatened or endangered under the State or Federal ESAs are currently supported or could feasibly be restored.

14 CCR § 895

Abbreviations Applicable Throughout Chapter

The California Forest Practice Rules often use abbreviations. These abbreviations are generally known by federal and state agencies, as well as the persons in the forest products industry. However, the Forest Practice Rules do not include a complete listing of all the abbreviations used. The five (5) abbreviations proposed for addition to the Forest Practice Rules are commonly utilized and accepted to represent: a) three (3) of the reviewing agencies responsible for determining if a Timber Harvesting Plan provides

adequate protection to watershed resources and the beneficial uses of the State's waters, including habitat for threatened and impaired salmonid species; b) the National Marine Fisheries Service, the agency responsible for ensuring the protection of anadromous fish species; and c) Habitat Conservation Plans, which are one effective tool for the management of scarce biological resources. These abbreviations are not currently listed in the Forest Practice Rules.

The proposed abbreviations are intended to ensure that the affected public, as well as the reviewing agencies understand the abbreviations that are used in the other proposed changes to the regulations, and those in the current Rules. This will help keep the Rules clear.

14 CCR § 895.1 **Definitions**

The California Forest Practice Rules commonly utilize technical terms in the regulation text that are generally recognized by federal and state agencies, as well as the forest products industry representatives. However, the Forest Practice Rules under section 895.1 (Definitions) do not include a comprehensive listing of applicable definitions for these terms. Of the nine (9) definitions proposed for addition or as amendments to the Forest Practice Rules, seven (7) are not currently listed in the Forest Practice Rules, although the terms are proposed for use in the regulation changes presented in this rulemaking package. Of the definitions proposed to be changed, the definition of "saturated soil conditions" doesn't adequately define the term. The current definition for this term does not address some important factors related to the protection of the state's waters. These factors include increases in turbidity in Class III and Class IV watercourses and impacts to watershed resources from the use of heavy equipment for site preparation. The revised language also includes clear provisions that the applicable water quality requirements cannot be violated. Additionally, the definition of "Watercourse or Lake Transition Line" doesn't adequately define that term in regard to the application of the proposed rule changes.

The proposed definitions are intended to ensure that the public, as well as the reviewing agencies, understand the terms that are utilized in the proposed changes to the regulations, and also those that are currently used in the Rules. This will also keep the Rules clear.

The addition of the definitions of the terms "bankfull stage", "beneficial functions of riparian zone", "channel zone", "natural recovery", and "inner gorge" is intended to provide common, enforceable definitions of terms being utilized in the proposed rule changes.

The amendment of the definition of the term "Saturated Soil Conditions" is intended to correct problems in the existing definition in the following ways:

- 1) It expands protection to currently unprotected Class III and IV waters.
- 2) It prohibits turbidity increase that would violate applicable water quality standards.
- 3) It extends application to mechanical site preparation.

- 4) It reduces unnecessarily duplicative language.
- 5) It adds excessive rutting by yarding or site preparation equipment as evidence of saturated soil conditions.

The addition of the definition of the term "stable operating surface" is intended to provide a common, enforceable definition of a term which is being utilized in the proposed rule changes.

The definition of "watercourse or lake transition line" doesn't adequately define that term in regard to the application of the proposed rule changes. Therefore, the Board chose to adopt a revised definition that conformed to recommendations provided by the Science Review Panel.

The addition of the definition of the term "watersheds with threatened or impaired values" is intended to provide a common, enforceable definition of a term which is being utilized in the proposed rule changes. This new definition is intended to give special recognition to those watersheds where populations of anadromous salmonids that are listed as threatened, endangered, or candidate under the State or Federal ESAs are currently supported or could feasibly be restored. This is intended to clearly identify those watersheds where more stringent forest practices are required.

14 CCR § 898 **Feasibility Alternatives**

The U.S. Environmental Protection Agency (USEPA) has listed several streams in the State as water quality limited under Section 303(d) of the Federal Clean Water Act (CWA); many of the listings are for factors that can be affected by timber operations. The current Forest Practice Rules require that an RPF disclose within a Timber Harvesting Plan whether the plan will have any significant adverse impact on the environment, and provide a methodology for assessing cumulative impacts. However, the Rules do not specifically require the RPF to assess impacts of the proposed project on waterbodies that are listed under section 303(d) of the Clean Water Act.

The proposed change in the regulations is needed to ensure that special recognition is given to those waterbodies listed pursuant to CWA Section 303(d) as water quality limited by factors (e.g., sediment, temperature, LWD) that may be affected by timber operations. It is also intended to ensure that feasible measures are incorporated into a plan to reduce adverse impacts to listed waterbodies to a level of insignificance.

14 CCR § 898.2 **Special Conditions Requiring Disapproval of Plans**

The U.S. Environmental Protection Agency (USEPA) has listed several streams in the State as water quality limited under Section 303(d) of the Federal Clean Water Act (CWA); many of the listings are for factors that can be affected by timber operations. The current Forest Practice Rules require the Director to disapprove a Timber Harvesting Plan if the plan does not conform to certain specified conditions. However, the Rules do not specifically require the Director to disapprove a plan if the plan does not conform to a

requirement of an applicable water quality control plan adopted or approved by the State Water Resources Control Board.

The proposed change in the regulations is needed to ensure that special recognition is given to those waterbodies listed pursuant to CWA Section 303(d) as water quality limited by factors (e.g., sediment, temperature, LWD) that may be affected by timber operations. It is also intended to ensure that the Rules specifically require the Director to disapprove a plan if the plan does not conform to a requirement of an applicable water quality control plan adopted or approved by the State Water Resources Control Board.

14 CCR §§ 914.8 [934.8, 954.8]

Tractor Road Watercourse Crossing

In 1996, the State Fish and Game Commission listed Coho salmon south of San Francisco Bay as threatened under the State Endangered Species Act (ESA), and the Department of Fish and Game subsequently executed a 2090 agreement with the California Department of Forestry and Fire Protection (CDF) to provide additional protection for Coho salmon. In 1997, the National Marine Fisheries Service (NMFS) listed Coho salmon as threatened throughout its range in California under the Federal ESA, and Steelhead trout have been designated as candidate species.

The changes in the Forest Practice Rules are necessary for maintaining the beneficial uses of water (which include aquatic habitat for threatened or endangered species) where they are in good condition and protecting them where they are threatened. The proposed additional rule language under 14 CCR §§ 914.8 [934.8, 954.8] is intended to ensure that all tractor watercourse crossings are constructed to allow upstream and downstream movement of fish species at all life stages, as well as the transport of water, which will ensure the adequate protection of listed anadromous fish species.

14 CCR §§ 916 [936, 956]

Intent of Watercourse and Lake Protection

The Forest Practice Act established the Legislature's intent to protect and give consideration to the public's need for the long-term protection of watershed resources and fisheries. It directed the Board of Forestry and Fire Protection to adopt regulations to control unreasonable effects on the state's waters. Knowing that some activities related to the harvesting of timber products can impact water; the Board developed Rules to show that they intended to specifically address these impacts through certain regulations. However, the Board determined that the current intent language did not adequately express its intent to ensure the protection of watercourses and lakes. It did not adequately express its intent to protect specific species related to these watercourses. Nor did it adequately express its intent to protect the functions of riparian zones. The Board determined that the intent language need to state clearly its intent to fully protected these things by maintaining them where they are in good condition, protecting them where they are threatened, and restoring them where they are impaired.

The proposed changes to the regulations are intended to ensure that the public and the reviewing agencies understand the Board's intent regarding watercourse and lake

protection. The changes are intended to address the most immediately pressing issue; how to deal with timber operations in a watershed where populations of anadromous salmonids that are listed as threatened or endangered under the State or Federal ESAs are currently supported or could feasibly be restored.

The Board believes the changes proposed for this section of the Rules will do several things. They will ensure the recognition of the need for protection of native aquatic and riparian-associated species; especially those that are listed as threatened, endangered, or otherwise of special concern. They will ensure the protection of the beneficial functions of riparian zones, which are linked to the protection of the beneficial uses of water and native aquatic and riparian-associated species. They will ensure that the public and the reviewing agencies recognize the need for consideration of existing impacts that go beyond those of a specific timber operation in addressing cumulative impacts. They will clearly indicate the Board's intent to restore water-related values where they are impaired, and it is feasible to do so. They will clearly indicate the Board's intent to ensure that all necessary and feasible measures are included in timber operations to assure protection and restoration of water-related values. They will clearly establish a performance standard or policy that timberland management objectives need to change depending on the condition of the water-related values they may affect. They will clearly establish a policy that the protection of water-related values is to be accomplished during all stages of a timber operation, from planning through completion, and that proposed and ongoing timber operations must at all times comply with all applicable legal requirements. They will clearly indicate those specific activities that must be avoided to meet the Board's intent to protect and/or restore native aquatic and riparian-associated species, the quality and beneficial uses of water, and beneficial functions of riparian zones. Finally, they will clearly establish land management priorities in those areas that are most in need of water quality protection such as watercourse and lake protection zones and watersheds with threatened or impaired values.

14 CCR §§ 916.2 [936.2, 956.2]

Protection of the Beneficial Uses of Water and Riparian Functions

The current Rules describe the factors that need to be considered in developing measures needed to protect the beneficial uses of water. In addition, the Rules state how the waters of the state are classified in the Rules, and that these classifications are based on key beneficial uses. This section of the Rules identifies those other sections where the basis for the classification is contained. It also identifies those other sections where the range of protective measures for each class is located. Furthermore, it allows a Registered Professional Forester or the Director to develop alternative protection measures when the listed measures are not adequate.

The proposed changes to the Rules will clarify which factors should be considered in developing watercourse and lake protection. They will ensure that all restorable uses of water are protected. They will ensure that all parties use both currently available and new site-specific information in identifying and evaluating existing and restorable uses. They will ensure that the protective measures account for the condition of the factors to be

protected, not just their presence. They will also ensure that the protection measures fully protect and/or restore water-related values in order to meet the Board's intent. Furthermore, the proposed changes to the Rules will ensure the understanding that the measures set forth in this article are the minimum required protection measures, and that more protective measures may be needed.

14 CCR §§ 916.6 [936.6, 956.6]

Alternative Watercourse and Lake Protection

The California Forest Practice Rules allow for the use of alternatives to the standard practices within a watercourse and lake protection zone provided that the reviewing agencies determine that the alternative meets the criteria of 14 CCR 916.5 [936.5, 956.5], and is therefore consistent with Rules of the Board. Currently, the Rules require that the Director shall not accept an alternative practice if two or more review agencies that participated in the review of the plan, including an on-the-ground inspection, provide written comments to the Director that lead to the conclusion that the alternative does not meet the criteria of 14 CCR 916.5 [936.5, 956.5]. Some reviewing agencies believe that the Rules should not require two agencies to provide such written comments when a single agency may have evidence indicating that the resources under their protection are not provided adequate protection through the alternative practices proposed. In addition, a reviewing agency may be able to determine that the alternative practice is inadequate in certain situations based upon review of the information provided in the plan without participating in an on-the-ground inspection.

The proposed changes in the regulations are intended to allow for the continued use of alternatives to the standard practices within a watercourse and lake protection zone provided that the reviewing agencies determine that the alternative meets the criteria of 14 CCR 916.5 [936.5, 956.5], and is therefore consistent with Rules of the Board. However, the change in the Rules will require that the Director shall not accept an alternative practice if one or more review agencies that participated in the review of the plan provide written comments to the Director that lead to the conclusion that the alternative does not meet the criteria of 14 CCR 916.5 [936.5, 956.5], regardless of whether the agency participated in an on-the-ground inspection.

14 CCR §§ 916.9 [936.9, 956.9]

Protection and Restoration in Watersheds with Threatened or Impaired Values

The Z'berg-Nejedly Forest Practice Act of 1973 established the legislature's intent to protect and give consideration to the public's need for long-term watershed protection, fisheries and wildlife, and it directed the State Board of Forestry (BOF) to adopt regulations to control unreasonable effects on the beneficial uses of the State's waters. It now appears appropriate to establish regulations that specifically address timber harvesting operations in watersheds with threatened or impaired values. The changes in the Forest Practice Rules are necessary for maintaining the beneficial uses of water (which include aquatic habitat for threatened or endangered species) where they are in good condition, protecting them where they are threatened, and restoring them where

they are impaired. This rulemaking package is intended to address the most immediately pressing issue: how to deal with timber operations in a watershed where: (1) water bodies are listed pursuant to CWA Section 303(d) as water quality limited due to factors (e.g., sediment, temperature, or large woody debris (LWD)) that may be affected by timber operations, or (2) populations of anadromous salmonids, other aquatic species, or riparian-dependent species that are listed as threatened or endangered under the State or Federal ESAs are currently supported or could feasibly be restored.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (a) states resource protection goals for every timber operation in a watershed with threatened or impaired water-related values, and lists objectives for meeting those goals. These objectives are based on those collaboratively developed by many experts involved in the California Salmon Initiative and the Watershed Restoration and Protection Council. They address those natural factors that are most critical for water-related values and are most likely to be affected by timber operations. The objectives do not prescribe any desired future conditions or numeric targets. Sediment loading, often the most severe water quality impact associated with timber operations, is addressed by the first two objectives. The first four objectives could apply to any land use; they express a policy of noninterference with natural recovery, simply requiring that timber operations result in no adverse changes in sediment loading, bank and channel stability, migratory passage, and stream flow. The fifth and sixth objectives address protection of beneficial functions of riparian zone vegetation and are more directly applicable to timber management. They have more of an active recovery component, because they are directly related to timber management activities that are fully under State jurisdiction, they are focused on the critical near-stream areas, and they address the other two major impacts of timber management on water-related values in California, increased thermal loading and decreased stream recruitment of LWD. The final objective is intended to address problems associated with changes in peak flow or flood frequency that may be a result of vegetation manipulation or changes in natural drainage patterns throughout the watershed.

Consistent with the WPRC report, the proposed additional rule language (policy statement) under 14 CCR §§ 916.9 [936.9, 956.9], subsection (b) recognizes that the impairment of a waterbody that leads to a listing of an anadromous fish species under the ESAs generally does not occur as the result of a single catastrophic event, but as the cumulative result of many events over time and space. This policy is intended to bring about institutionalized recognition and acceptance of the reality and importance of adverse cumulative watershed effects and of the need to take responsibility for reducing them.

As discussed under 14 CCR 916, the proposed additional rule language (policy statement) under 14 CCR §§ 916.9 [936.9, 956.9], subsection (c) recognizes the critical importance of near-stream/riparian areas along Class I and II waters and their beneficial functions in protecting water-related values. It recognizes that management priority in such areas is resource protection or restoration. Consistent with other aquatic conservation strategies, this provision creates an additional management buffer outside of

the inner WLPZ. Timber management and operations would be lightest and most protective within the WLPZ, somewhat greater and less restricted in the outer zone, and least restricted elsewhere.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (d) is intended to allow the use of offsetting sediment or thermal loading or other cumulative watershed effects that may exist throughout a planning watershed where they are fully described and the parties responsible for implementation are identified in the plan. Those measures that most directly mitigate the timber operation's impacts are given preference.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (e) is intended to prevent direct impacts to watercourses by substantially limiting harvest within the channel zone. Operations will be limited to those instances where needed to improve salmonid habitat, for the construction or reconstruction of approved watercourse crossings, for the protection of public health and safety, or to allow for full suspension cable yarding when necessary.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (f) expands the minimum WLPZ width for Class I waters from 75 feet to 150 feet.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (g) is intended to provide canopy retention standards for Class I waters that are consistent with CDF's "Coho Considerations" document.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (h)(1) is intended to provide informational requirements to ensure that the timber harvesting and yarding within a Class I WLPZ will conform with the goals in subsection (a).

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (h)(2) is intended to provide information regarding existing permanent crossings of Class I waters, including information on how they will be used or maintained during timber operations to minimize risks to water-related values (especially fish passage).

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (h)(3) is intended to provide full disclosure of specifications for any new or reconstructed Class I road crossings needed to protect water-related values.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (i) is intended to ensure adequate recruitment of the Large Woody Debris (LWD) needed to provide instream structure for proper hydrologic function and aquatic habitat to support water-related values.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (j) is intended to specify the minimum width for the Class II watercourse and lake protection zones (WLPZ). It is intended to establish a WLPZ width of 100 feet.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (k) is intended to provide canopy retention standards for Class II waters that are consistent with CDF's "Coho Considerations" document.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (l) is intended to address operations within an inner gorge. It is intended to prevent operations within an inner gorge or on excessively steep slopes from resulting in mass failure of the slopes, which could contribute significant amounts of soil and debris into a watercourse.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (m) is intended to ensure added protection for Class III watercourses. This protection will be provided through a required ELZ or EEZ under Alternative 1, and through a required WLPZ under Alternative 2. Protection will also be provided through the retention of all hardwoods.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (n) is intended to ensure that all relevant information is evaluated in developing appropriate winter period forest practices, and provides minimum operating standards for winter period operations that are anticipated to prevent significant erosion and sedimentation.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (o) is intended to provide restrictions on the construction, reconstruction, or use of roads or landings so that soil or other material will not be transported to a watercourse or lake as a result of these operations.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (p) is intended to ensure that tractor road construction and use cannot be advanced to the point that the installation of needed drainage facilities cannot be completed prior to the start of rains capable of transporting sediment to watercourses.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (q) is intended to provide soil stabilization treatment standards that are needed to prevent accelerated soil erosion or movement within a WLPZ, Equipment Exclusion Zone (EEZ), or Equipment Limitation Zone (ELZ).

- a) The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (q)(1) requires that all WLPZ/EEZ/ELZ soil stabilization treatments must be described in the plan so their adequacy can be ensured during plan review. Time limits for doing the treatments are established to ensure that soil

disturbance does not get so far ahead of treatment that treatment cannot be completed prior to the start of heavy rains.

- b) The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (q)(2) requires the treatment of the traveled surface of roads to prevent generation of sediment or concentration of surface runoff during periods of use.
- c) The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (q)(3) requires the treatment of other specific disturbed areas to prevent the occurrence of a discharge of sediment or concentrated runoff into waters. Coverage of at least 90% is needed to ensure successful treatment.
- d) The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (q)(4) requires the treatment of an undisturbed area where its natural ability to filter sediment, minimize soil erosion, and stabilize banks of watercourses and lakes and otherwise buffer waters from the effects of a timber operation is low.

To reduce sediment loading from existing active erosion sites in the logging area, they need to be identified, their significance and the feasibility of remedying them needs to be evaluated, and remediation needs to be addressed in the plan. The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (r) requires that the plan preparer do the needed work and address the remediation as part of the plan so the adequacy of the work and plan can be evaluated. This is intended to provide information related to sites with the potential to impact water resources, and that can be remediated. The information is to be provided in the plan, specifying the work to be done.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (s) is intended to reduce sediment impacts associated with erosion originating from roads and landings through a required three year erosion control maintenance period on specified roads and landings. Three years is the maximum duration of the erosion control maintenance period allowed by statute.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (t) is intended to tighten the restrictions on site preparation in watercourses. It further requires that burning prescriptions minimize loss of LWD, and that the measures to accomplish this be submitted in the plan for evaluation.

Water drafting in watercourses can adversely affect aquatic species in several ways: (i) too much water can be withdrawn to allow continued migration or reproduction, (ii) individuals can be sucked up through water intakes, (iii) construction and use of water holes and approaches can generate sediment and allow petroleum or other contaminants into the water. The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (u) is intended to prevent these adverse effects on water-related values.

Emergency and exempt timber operations are not subject to interagency review, so their potential impacts cannot be fully evaluated. The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (v) is intended to exclude such operations from the zones established to protect water-related values.

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (w) is intended to ensure that proposed WLPZ salvage logging is fully described and subject to agency evaluation through agency review of a plan, a Habitat Conservation Plan (HCP), or Sustained Yield Plan (SYP).

The proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (x) clarifies that nonstandard practices, as approved by CDF and subsequently implemented, shall provide a level of protection needed to meet the goals stated in 14 CCR §§ 916.9 [936.9, 956.9], subsection (a).

Consistent with other rule sections, the proposed additional rule language under 14 CCR §§ 916.9 [936.9, 956.9], subsection (y) is intended to provide that alternative practices can be used where needed to achieve the goals stated under 14 CCR §§ 916.9 [936.9, 956.9], subsection (a).

14 CCR §§ 916.11 [936.11, 956.11]

Effectiveness and Implementation Monitoring

The current Forest Practice Rules do not require that effectiveness monitoring be conducted to determine whether the mitigation measures employed under the provisions of a Timber Harvesting Plan have resulted in adequate protection of resources. This type of effectiveness monitoring is especially important to determine if mitigation measures have been adequate to protect the beneficial uses of water including the protection of anadromous fish species.

Where fish and other water-related values are already threatened or impaired, the project proponents may be required to demonstrate that such operations can take place without causing additional threat or damage. The proposed additional rule language under 14 CCR §§ 916.11 [936.11, 956.11] is intended to include evaluation of potential land failures, accelerated rate of road construction or harvesting within a watershed, concentration or intensity of harvesting activity near watercourses, and potential for accelerated windthrow. The design and implementation of the evaluation shall be done in consultation with the Director, the RWQCB or DFG, and THP submitter.

14 CCR §§ 916.12 [936.12, 956.12]

Section 303(d) Listed Watersheds

The U.S. Environmental Protection Agency (USEPA) has listed nineteen North Coast streams as water quality limited under Section 303(d) of the Federal Clean Water Act (CWA); many of the listings are for factors that can be affected by timber operations. The *1988 California 303(d) List and TMDL Priority Schedule* indicates that many of the streams listed are impaired due to "sedimentation/siltation". In forested watersheds

suffering from excessive sediment loading, most of the sediment from human sources is associated with the road system. The *1988 California 303(d) List* specifically cites "Logging Road Construction/Maintenance" as a source in regard to the impairment of many of these streams. In 1997, USEPA entered into a court-mandated consent decree requiring that Total Maximum Daily Loads (TMDLs) be established for these streams over the next 15 years according to a specified schedule. Upon establishment of a TMDL by either USEPA or a California Regional Water Quality Control Board (RWQCB), the RWQCB must develop an implementation plan to ensure attainment of the TMDL. In watersheds with significant silvicultural activity, the implementation plan will address timber operations and may require forest practices that are different than those in the Forest Practice Rules (Rules).

The Z'berg-Nejedly Forest Practice Act of 1973 established the legislature's intent to protect and give consideration to the public's need for long-term watershed protection, fisheries and wildlife, and it directed the State Board of Forestry (BOF) to adopt regulations to control unreasonable effects on the beneficial uses of the State's waters. Since the listing of many watersheds in the state as impaired due to sedimentation or siltation, much of which has been attributed to the construction of roads in association with timber harvesting activities; it now appears appropriate to establish regulations that specifically address roads and landings in watersheds with threatened or impaired values. The changes in the Forest Practice Rules are necessary for maintaining the beneficial uses of water (which include aquatic habitat for threatened or endangered species) where they are in good condition, protecting them where they are threatened, and restoring them where they are impaired.

It is the intent of the changes proposed under 14 CCR §§ 916.12 [936.12, 956.12] that for any planning watershed in which timber operations could contribute to the pollutants or stressors which have been identified as limiting water quality in a water body listed pursuant to 303(d) Federal Clean Water Act, the Department shall, in collaboration with the appropriate RWQCB and SWRCB, prioritize watersheds in which the following will be done: 1) conduct or participate in any further assessment or analysis of the watershed that may be needed, 2) participate in the development of Total Maximum Daily Load (TMDL) problem assessment, source assessment, or load allocations related to timber operations, and 3) if existing Rules are deemed not to be sufficient, develop recommendations for watershed-specific silvicultural implementation, enforcement and monitoring practices to be applied by the Department.

14 CCR §§ 923.3 [943.3, 963.3]

Watercourse Crossings

In 1996, the State Fish and Game Commission listed Coho salmon south of San Francisco Bay as threatened under the State Endangered Species Act (ESA), and the Department of Fish and Game subsequently executed a 2090 agreement with the California Department of Forestry and Fire Protection (CDF) to provide additional protection for Coho salmon. In 1997, the National Marine Fisheries Service (NMFS) listed Coho salmon as threatened throughout its range in California under the Federal ESA, and Steelhead trout have been designated as candidate species.

The Z'berg-Nejedly Forest Practice Act of 1973 established the legislature's intent to protect and give consideration to the public's need for long-term watershed protection, fisheries and wildlife, and it directed the State Board of Forestry (BOF) to adopt regulations to control unreasonable effects on the beneficial uses of the State's waters. It now appears appropriate to establish regulations that specifically address timber harvesting operations in watersheds with threatened or impaired values. The proposed additional rule language under 14 CCR §§ 923.3 [943.3, 963.3] is intended to ensure that all watercourse crossings are constructed to allow passage of debris to prevent blockage by requiring them to accommodate the waters from a 100 year flood event. The proposed additional rule language is also intended to provide minimum specifications for permanent culverts installed within Class I watercourses to ensure the adequate protection of aquatic species. These specifications are intended to address upstream and downstream movement of aquatic species at all life stages, as well as the transport of water, sediment, and debris at 100-year flood levels.

14 CCR §§ 923.9 [943.9, 963.9]

**Roads and Landings in Watersheds with
Threatened or Impaired Values**

The Z'berg-Nejedly Forest Practice Act of 1973 established the legislature's intent to protect and give consideration to the public's need for long-term watershed protection, fisheries and wildlife, and it directed the State Board of Forestry (BOF) to adopt regulations to control unreasonable effects on the beneficial uses of the State's waters. Since the listing of many watersheds in the state as impaired due to sedimentation or siltation, much of which has been attributed to the construction of roads in association with timber harvesting activities; it now appears appropriate to establish regulations that specifically address roads and landings in watersheds with threatened or impaired values. The changes in the Forest Practice Rules are necessary for maintaining the beneficial uses of water (which include aquatic habitat for threatened or endangered species) where they are in good condition, protecting them where they are threatened, and restoring them where they are impaired.

The proposed additional rule language under 14 CCR §§ 923.9 [943.9, 963.9], subsection (a) is intended to require the disclosure of the locations and specifications for road and landing abandonment or other measures to achieve no net increase in road density within the ownership within a watershed, so that the adequacy of the measures can be evaluated and perhaps compared for consistency with other proposals of adjacent landowners.

The proposed additional rule language under 14 CCR §§ 923.9 [943.9, 963.9], subsection (b) is intended to establish appropriate standards for the width of logging roads, and to include appropriate specifications for road drainage in watersheds with threatened or impaired values.

The proposed additional rule language under 14 CCR §§ 923.9 [943.9, 963.9], subsection (c) is intended to provide information on the limiting factors associated with road construction, and on road designs, which will help to determine if the specified

provisions for road construction are adequate to reduce the risk to water-related values. The rule is also intended to provide specifications related to road construction and the deposition of spoils, as well as requirements for recountouring of slopes if fills are removed.

The proposed additional rule language under 4 CCR §§ 923.9 [943.9, 963.9], subsection (d) is intended to ensure that roads with excessive grades will have adequate erosion control measures included in the plan.

The proposed additional rule language under 14 CCR §§ 923.9 [943.9, 963.9], subsection (e) is intended to ensure that the proposed measures regarding the location, design, placement, and removal of drainage structures and erosion control features, and the rationale used to develop them are included in the plan and can be evaluated. The rule language is also intended to establish specific minimum requirements for drainage structures and erosion control features in watersheds with threatened or impaired values.

DISCLOSURES REGARDING THE PROPOSED ACTION

The Board has determined the proposed action will have the following effects:

- Mandate on local agencies and school districts: None are known.
- Costs or savings to any State agency: None are known.
- Cost to any local agency or school district which must be reimbursed in accordance with the applicable Government Code (GC) sections commencing with GC § 17500: None are known.
- Other non-discretionary cost or savings imposed upon local agencies: None are known.
- Cost or savings in federal funding to the State: None are known.
- Significant adverse economic impact on business, including the ability of California businesses to compete with businesses in other states: The rule proposal will affect businesses and small business related to the timber industry by increasing the cost for timber harvesting. These extra costs are associated with planning, operations, and monitoring, and may include but are not limited to: additional planning, construction and maintenance costs for roads and watercourse crossings, additional cost of professional consultations, and costs associated with a reduction in long term sustained yield (LTSY). There may also be additional cost associated with additional inspections.

Although the Board staff has identified the potential for increased costs associated with the changes to the Rules, the Board staff also identified the potential for increased benefits to other sectors of business in the State. Some of the benefits

derived from the change in the Rules could be contributed to both market and non-market values related to increases in anadromous fish populations, reduction in the costs of flood control, and the ability of land managers to continue to harvest timber without the restrictions that could result from a determination of "take" by the National Marine Fisheries Service. Benefits will also be derived from potentially enhanced beneficial uses of water for drinking and other recreational uses besides those related to sport fishing.

The Board staff does not anticipate that the increased costs will result in a significant adverse economic impact on business, nor has it determined that it will affect the ability of California businesses to compete with businesses in other states a significant adverse impact on the ability of businesses to compete with businesses in other states.

(Note: cost and benefit estimates for the individual Rules are presented in the *Initial Statement of Reasons*.)

- Potential cost impact on private persons or directly affected businesses: As indicated above, the rule proposal will affect businesses, and large and small landowners with an interest in the timber products industry by increasing the cost for timber harvesting. These extra costs are associated with planning, operations, and monitoring, and may include but are not limited to: additional planning, construction and maintenance costs for roads and watercourse crossings, additional cost of professional consultations, and costs associated with a reduction in long term sustained yield (LTSY).

The Board staff anticipates that offsetting benefits will be derived from increases in recreation and commercial fishing, as well as reductions in the costs of flood control in some areas.

(Note: cost and benefit estimates for the individual Rules are similar to those referenced above and are presented in the *Initial Statement of Reasons*.)

- Significant effect on housing costs: None are known.
- Adoption of these regulations may create or eliminate jobs within California. It is estimated that the reduction in long term sustained yield resulting from the reduction in timber available for harvest could result in the loss of some 4,800 jobs over the long term. However, the increase in fish populations and enhanced recreational values that could result from the increased protection measures over the long term could result in the creation of jobs in the fishing industry and related industries over the long term, offsetting the loss of jobs in other sectors of the economy.
- Adoption of these regulations will not: (1) create new businesses or eliminate existing businesses within California; or (2) affect the expansion of businesses currently doing business within California.

- The proposed Rules do not conflict with, or duplicate Federal regulations.

BUSINESS REPORTING REQUIREMENT

The Board finds that it is necessary for the health, safety, or welfare of the people of this state that the proposed regulations under 14 CCR §§ 914.8 [934.8, 954.8], 916.9 [936.9, 956.9], 916.11 [936.11, 956.11], 923.3 [943.3, 963.3], and 923.9 [943.9, 963.9], which require a report, apply to business.

PLAIN ENGLISH DETERMINATION AND OVERVIEW

Small Business Determination

The Board has determined that the proposed regulations affect small businesses.

Plain English Policy Overview

Within the last few years, the Coho salmon have been listed throughout their range as a threatened species. The steelhead trout has also been listed as a candidate species. In addition, several watersheds within the State have been listed as being limited in regard to water quality. Many of the factors that led to the listing of these species, and the watersheds can be affected by timber harvesting operations.

The Z'berg-Nejedly Forest Practice Act of 1973 established the legislature's intent to consider the public's need for long-term watershed protection, fisheries and wildlife. It directed the State Board of Forestry and Fire Protection to adopt Rules to control unreasonable effects on the beneficial uses of the State's waters.

The California Forest Practice Rules use abbreviations and technical terms in the Rules. However, the Rules do not include a complete listing of those abbreviations. The abbreviations proposed for addition to the Forest Practice Rules are used to represent agencies responsible for determining if a Timber Harvesting Plan provides adequate protection to watershed resources and the beneficial uses of the State's waters, including habitat for listed salmonid species. These abbreviations are not currently listed in the Forest Practice Rules. The proposed additional abbreviations are intended to ensure that the public and the reviewing agencies understand the abbreviations that are used in the proposed changes to the Rules. The definitions proposed for addition or as amendments to the Forest Practice Rules are intended to ensure that the public, as well as the reviewing agencies, understand the terms that are utilized in the proposed changes to the regulations, and also those that are currently used in the Rules. This will also keep the Rules clear.

The Board of Forestry and Fire Protection recognized that some activities associated with the harvesting of timber products can adversely impact the waters of the State and that the current intent language in the Rules did not convey its intent to ensure that the

beneficial uses of water are fully protected. The proposed additions and changes to the Rules are intended to ensure that the public, as well as the reviewing agencies understands the Board's intent regarding watercourse and lake protection. The changes are intended to address the most immediately pressing issues: how to deal with timber operations in a watershed where: (1) water bodies are listed pursuant to CWA Section 303(d) as water quality limited due to factors (e.g., sediment, temperature, or large woody debris (LWD)) that may be affected by timber operations, or (2) populations of anadromous salmonids, other aquatic species, or riparian-dependent species that are listed as threatened or endangered.

Furthermore, the Board of forestry and Fire Protection recognized that the current Forest Practice Rules do not adequately describe the factors that need to be considered in developing measures needed to protect the waters of the State. The current Forest Practice Rules do not adequately acknowledge the importance of functioning riparian habitat, and the condition of the factors that contribute to maintenance or restoration of functioning riparian habitat and the beneficial uses of water. Additionally, the current Rules focus on the restorable uses of water for fisheries and do not adequately address the need to consider all restorable uses of water in developing protection measures. Also, the current Rules do not adequately convey that the protective measures presented in the Rules are to be considered the minimum required, and that additional measures may be required based upon site specific conditions identified during the preparation and review of a Timber Harvesting Plan. The proposed additions and changes to the Rules are intended to address these limitations to the current Rules.

The proposed additional rule language states resource protection goals for every timber operation in a watershed with threatened or impaired water-related values. These goals are based on those developed by many experts involved in the protection of salmon species. They address factors that are critical for water-related values and are most likely to be affected by timber operations. The proposed additional rule language also recognizes that the impairment of a water body or species that leads to a listing generally does not occur as the result of a single catastrophic event, but as the cumulative result of many events over time and space. The proposed Rules establish the means necessary to meet the goals established for the protection of the State's waters.

Since the listing of many watersheds in the State as impaired is due to sedimentation or siltation, much of which has been attributed to roads, the new Rules specifically address roads and landings in watersheds with threatened or impaired values. The changes in the Rules are intended to maintain the beneficial uses of water where they are in good condition, protect them where they are threatened, and restore them where they are impaired. The rule changes will result in no net increase in road density within the ownership within a watershed. They will establish standards for the width of logging roads, and include appropriate specifications for road drainage in watersheds with threatened or impaired values. They will require that additional information be provided on the limiting factors associated with road construction, and on road designs, which will help to determine if the provisions for road construction are adequate to reduce the risk to water-related values. The Rules are also intended to ensure that roads with excessive

grades will be adequately surfaced. The proposed additional rule language is further intended to ensure that the proposed measures regarding the location, design, placement, and removal of drainage structures and erosion control features, and the reasoning used to develop them are included in the plan and can be evaluated. The rule language is also intended to establish specific minimum requirements for drainage structures and erosion control features in watersheds with threatened or impaired values.

Availability of the Text in Plain English

According to Government Code section 11346.2, (a)(1) an agency that adopts a regulation that affects small businesses must draft the regulation in plain English as defined in 11342(e). The Board has attempted to draft the regulations in plain English whenever possible, and non-familiar language is defined within the regulations. However, the Board has determined that it is not feasible to fully draft the regulations in plain English due to the technical nature of the regulations. Therefore, a non-controlling plain English summary is available from the agency contact person named in the notice.

To facilitate review, and provide for meaningful public participation in the rulemaking process, the *Informative Digest/Plain English Overview* for this notice and any future notices pertaining to the rule section changes referenced in this notice shall constitute the non-controlling plain English summary of the regulation.

CONSIDERATION OF ALTERNATIVES

In accordance with Government Code § 11346.5(a)(12), the Board must determine that no alternative it considers would be more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons than the proposed action.

The Board has determined that the proposed regulations may impact businesses. However, the Board has not identified any alternatives that would lessen any adverse impact on small businesses at this time. The Board invites interested persons to present statements or arguments with respect to alternatives to the proposed regulations at the scheduled hearing, or during the written comment period. Submissions may include the following considerations: (i) The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to businesses, (ii) Consolidation or simplification of compliance and reporting requirements for businesses, (iii) The use of performance standards rather than prescriptive standards, or (iv) Exemption or partial exemption from regulatory requirements for businesses.

CONTACT PERSON

Questions about the proposed action, or requests for copies of the proposed text of the regulations, the *Initial Statement of Reasons*, and modified text of the regulations; may be directed to:

Board of Forestry and Fire Protection
Attn: Dennis O. Hall
Regulations Coordinator
P.O. Box 944246
Sacramento, CA 94244-2460
Telephone: (916) 653-9418 or,
(916) 653-8007

AVAILABILITY OF STATEMENT OF REASONS AND TEXT OF PROPOSED REGULATIONS

The Board has prepared an *Initial Statement of Reasons* providing an explanation of the purpose, background, and justification for the proposed regulations. The statement is available from the contact person on request.

A copy of the express terms of the proposed action using UNDERLINE to indicate an addition to the California Code of Regulations and ~~STRIKETHROUGH~~ to indicate a deletion, is also available from the contact person named in this notice.

The Board will have the entire rulemaking file, including all information considered as a basis for this proposed regulation, available for public inspection and copying throughout the rulemaking process at its office at the above address. As of this date, this notice is published in the *Notice Register*.

AVAILABILITY OF CHANGED OR MODIFIED TEXT

After holding the hearing and considering all timely and relevant comments received, the Board may adopt the proposed regulations substantially as described in this notice. If the Board makes modifications which are sufficiently related to the originally proposed text, it will make the modified text—with the changes clearly indicated—available to the public for at least 15 days before the Board adopts the regulations as revised. Notice of the comment period on changed regulations, and the full text as modified, will be sent to any person who:

- a) testified at the hearings,
- b) submitted comments during the public comment period, including written and oral comments received at the public hearing, or
- c) requested notification of the availability of such changes from the Board of Forestry and Fire Protection.

Requests for copies of the modified text of the regulations may be directed to the contact person listed in this notice. The Board will accept written comments on the modified regulations for 15 days after the date on which they are made available.

Dennis O. Hall
Regulations Coordinator
Board of Forestry and Fire Protection

doh: 01/18/2000
File: 45 Day Notice